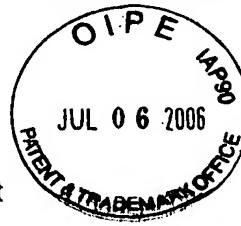


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No. : 10/694,349
Confirmation No. : 2564
Applicant : Lubcke
Filed : 10/28/03
Title : Measuring instrument
TC/A.U. : 2858
Examiner : M. Kramskaya
Docket No. : LUBC3001C/FJD
Customer No. : 23364



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IFW

BRIEF ON APPEAL TRANSMITTAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

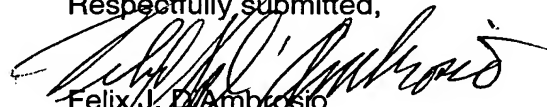
Transmitted herewith is a Brief on Appeal in the above-identified application.

1. ☐ An Oral Hearing is requested.
2. ☐ An Oral Hearing is requested on _____.
3. ☒ An extension of time for filing the Brief on Appeal
(X) is hereby requested.
() was requested on _____.
4. The fee is calculated as follows:

Filing Brief on Appeal	\$ 500.00
Request for Oral Hearing	\$
Request for a <u>ONE</u> Month Extension of Time	\$ 120.00
5. ☐ No fee required.
6. ☒ A check in the amount of \$ 620 is enclosed.
7. ☐ Please charge Deposit Acct. No. 02-0200 in the amount of \$_____.
8. ☐ The Commissioner is hereby authorized to charge payment of the following fees during the pendency of this application or credit any overpayment to Deposit Account No. 02-0200.
 - () Any patent application processing fees under 37 CFR 1.17.
 - () The Issue Fee set in 37 CFR 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 CFR 1.311(b).
 - () Any filing fees under 37 CFR 1.16 for presentation of extra claims.

Date: July 6, 2006

Respectfully submitted,


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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS AND INTERFERENCES**

Application No. : 10/649,349
Confirmation No. : 2564
Applicant : Lubcke
Filed : October 28, 2003
Title : Measuring instrument
TC/A.U. : 2858
Examiner : M. Kramskaya
Docket No. : LUBC3001C/FJD
Customer No. : 23364

BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22202-3514

Sir:

INTRODUCTORY COMMENTS

Pursuant to the provisions of 37 CFR 41.37, submitted herewith is Applicant/Appellant's Brief on Appeal along with the required fee. The period for response has been extended to expire on July 6, 2006 by filing herewith a Petition for a One Month Extension of Time and payment of the required fee.

Any additional fees necessary for this appeal may be charged to the undersigned's Deposit Account No. 02-0200.

REAL PARTY IN INTEREST

(37 CFR 41.37(c)(1)(i))

The real party in interest is Applicant/Appellant's assignee Endress + Hauser GmbH + Co. The assignment was recorded on October 2, 2000 at Reel 011186 and Frame 0632 in parent application, no. 09/677,725, now U.S. Patent No. 6,684,340.

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RELATED APPEALS AND INTERFERENCES

(37 CFR 41.37(c)(1)(ii))

There are no related appeals or interferences with respect to the invention defined in this application.

STATUS OF CLAIMS

(37 CFR 41.37(c)(1)(iii))

Claims 1 - 12 and 19 - 39 are pending in this application.

Claims 1 - 12 have been finally rejected.

Claims 19 - 39 are withdrawn as non-elected.

STATUS OF AMENDMENTS

(37 CFR 41.37(c)(1)(iv))

A Request for Reconsideration was filed after issuance of the Office Action of December 13, 2005.

SUMMARY OF CLAIMED SUBJECT MATTER

(37 CFR 41.37 (c)(1)(v))

(References are to page and line of the specification)

The invention in this appeal relates to a measuring arrangement including at least one measurement instrument (pg 1, lines 4 and 5). The measuring instrument generally comprises a sensor, which registers a physical measured variable and converts it into an electrical variable, and electronics which convert the electrical variable into a measurement signal. The measuring instruments have to be connected individually, that is to say, they have to be supplied with power and the measurement signal has to be fed to a higher-order unit. (Pg 4, lines 14 - 210).

Certain measurement instruments have associated with them at least a first and an identical second pair of terminals (pg. 5, lines 32 and 33). For example, the lines 1 and 3 (Figs. 1 and 2) are connected to a first pair and a second pair of terminals, respectively. (Pg 5, line 35 to pg. 6, line 2). The first line 5,9 of each pair of lines 1,3 has a controllable current source 21,23 which sets a current flowing via the respective pair of lines 1,3 to a specific value as a function of a control signal. (Pg. 6, lines 33 - 37). It is common in measurement and control technology to vary the signal current as a function of the measured value between a minimum signal current of 4mA and a maximum signal current of 20mA. For this the necessary power is provided by the higher-order unit. (Pg. 8, lines 1 - 7).

In the measurement instrument 61, the current flowing via the respective first pairs of lines 1 is a signal current, which represents a measured value which is registered and used by the higher-order unit 57. A supply current flows via the second pair of lines 3. This supply current is either ignored by the higher-order unit 57, or else it can be allocated an alarm function or the like. (pg. 14 line 35 to pg. 15, line 6).

The higher-order unit 57 has a power supply 65 which is connected to a voltage source 63 and via which individual pairs of terminals 1. to 10. Are supplied. Each pair of terminals 1. to 10. Is assigned a pick-up unit, which registers a current flowing via a pair of terminals and generates a signal corresponding to the current, and feeds it to an intelligent core 67. All the incoming measured values are monitored and, in accordance with a flow chart stored in the intelligent core 67 perform an operation as a function of the instantaneous measured values (pg. 13, lines 12 - 25).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

(37 CFR 41.37(c)(1)(vi))

(!) Claims 1, 6 and 10 - 12 are finally rejected under 35 USC 102(b) as being anticipated by Venditti

(2) Claims 2, 8 and 9 are finally rejected as being unpatentable under 35 USC 103(a) over Venditti in view of Wetzel et al.

(3) Claims 3 - 5 are finally rejected as being unpatentable under 35 USC 103(a) over Venditti in view of Schmidt et al.

(4) Claim 7 is finally rejected as being unpatentable under 35 USC 103(a) over Venditti in view of Belforte et al.

ARGUMENTS

(37 CFR 41.37(c)(1)(vii))

(1)

In applying Venditti under 35 USC 102(b) the examiner states, in the final rejection that the "measuring unit 20" and the "higher order unit 18" are electrically connected by "a first pair of lines (signal 1, signal 2)," and by "a second pair of lines (power +, power -)." And then concludes that according to Venditti "a signal current flows via said pair of lines.....and a supply current flows via said second pair of lines..."

Applicant cannot agree with this analysis. The "supply current and at least a portion of the signal current" must "supply said measuring instrument" as recited in

claim 1. That is, the measuring instrument and the higher-order unit have to be connected by a second pair of lines and by this connection the measuring instrument is powered utilizing "said supply current and at least a portion of the signal current supply." This is not what the arrangement noted by the examiner does. This analysis is commented upon by the examiner in his Advisory Action dated April 3, 2006, but really adds nothing new to his rejection. Accordingly, Applicant/Appellant is repeating their position and again noting what the CAFC noted in *Ex parte Beuther*, 71 USPQ2d 1313 (Fed. Cir. 2003) that the examiner cannot "pick, choose and combine" features of a reference which may not even be related in the manner recited in the claim. Venditti does not power the measuring unit as recited in claim 1. Venditti does not disclose the use of one of two supplying currents (each flowing in one of two pairs of lines and each powering the measuring unit). Nor does Venditti disclose that one of the two supplying currents additionally represents a measured value. (Claim 1 states that "said current representing an instantaneous value").

From considering col. 5, line 64 to col. 6, line 1 of Venditti, it is clear that the electrical parameter delivered from unit 18 to the instrument 20 does not serve to power the unit 20, as claimed in claim 1. It must be emphasized that Venditti does not disclose powering the instrument 20 via two pairs of lines. The examiner's reference to col. 6, lines 17 - 20, does not change this conclusion. Claim 1 does not refer to a ground line which is "internal to instrument."

All of the positively recited limitations in claim 1 are not, it is respectfully submitted, found in Venditti.

(2)

Wetzel et al when combined with Venditti does not change anything because Wetzel et al does not teach the powering feature noted above. Wetzel et al discloses the type of two wire device noted on page 1, line 31 to page 2, line 26 of the present specification. And if one were to continue reading to page 3, line 9 of the specification, they would find that such a device has a number of disadvantages which the present

invention overcomes. The combination of Venditti and Wetzel et al, therefore, cannot render the claims unpatentable under 35 USC 103 because together they lack the necessary teaching to reach the positively recited elements of the rejected claims.

(3) and (4)

The same conclusion follows after considering Schmidt et al and Belforte et al when each is combined with Venditti because the feature recited in claims 3 - 5 and 7 are not found in either Schmidt et al or Belforte et al. For example, the transmitter feed units of claims 3 - 5 are not apparent from Schmidt et al, at least as claimed in claims 3 - 5. As for Belforte et al, it lacks the necessary teaching to assist Venditti when considering claim 1, from which claim 7 depends.

CONCLUSION

In view of the above, it is respectfully submitted that claims 1 - 12 should be allowed over the references of record and those applied.

Respectfully submitted
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Date: July 6, 2006

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APPENDIX OF CLAIMS
(37 CFR 41.37 (c)(1)(viii))

1. A measuring arrangement comprising: a measuring instrument and a higher-order unit, said measuring instrument and said higher-order unit being electrically connected with each other by a first pair of lines and a second pair of lines, wherein during operation a signal current flows via said first pair of lines and a supply current flows via said second pair of lines, said signal current representing an instantaneous measured value, and said supply current and at least a portion of the signal current supply said measuring instrument.

2. The measuring arrangement as claimed in claim 1, wherein the supply current varies in accordance with a current power demand of said measuring instrument.

3. The measuring arrangement as claimed in claim 1, wherein the higher order unit comprises at least two transmitter feed units, each of said transmitter feed units being operable to supply a conventional two-wire measuring instrument with electrical power.

4. The measuring arrangement as claimed in claim 3, wherein each of said first and said second pairs of lines is connected, respectively, with one of said at least two transmitter feed units.

5. The measuring arrangement as claimed in claim 3, wherein each of said at least two transmitter feed units is connected with one of said first and said second pairs of lines, respectively.

6. The measuring arrangement as claimed in claim 1, wherein each of said first and said second pairs of lines is connected to a current-voltage limiter.

7. The measuring arrangement as claimed in claim 1, wherein said first and said second pairs of lines are galvanic isolated from each other.

8. The measuring arrangement as claimed in claim 1, wherein the measuring instrument comprises a sensor for detecting at least one physical variable.

9. The measuring arrangement as claimed in claim 8, wherein the higher-order unit comprises a bus line for transmitting measured values representing said at least one physical variable.

10. An electrically powered measuring device, comprising: two ports that constitutes a two-wire interface; and at least one additional port for connecting a second cable, wherein:

said two-wire interface connecting a dual-conductor cable to the electrically powered measuring device, by way of which electric power is fed to the electrically powered measuring device;

a measuring signal from the electrically powered measuring device is transmitted; and

said second cable allows the feeding of additional electric power to the electrically powered measuring device.

11. The electrically powered measuring device as claimed in claim 10, wherein said at least one additional port comprises two further ports, constituting a second two-wire interface for connecting a second dual-conductor cable.

12. The electrically powered measuring device as in claim 11, wherein the current emanating from the first two-wire interface and/or the current emanating from the second two-wire interface is limited.

EVIDENCE APPENDIX

There is no evidence being relied upon which was submitted pursuant to 37 CFR 1.130, 1.131 or 1.132.

U.S. Pat. Appl. 10/649,349

RELATED PROCEEDINGS APPENDIX

There is no related proceeding being relied upon.

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